15

5

10

## SYSTEM AND METHOD FOR MAXIMIZING USAGE OF COMPUTER RESOURCES IN SCHEDULING OF APPLICATIONS

## ABSTRACT OF THE INVENTION

A task schedule is enforced among multiple processes by setting process priorities based upon which tasks are running on which processes and based upon the task schedule. The task scheduling may be provided by a local or global scheduler which uses application information to prioritize tasks. The task schedule, or priority list, is provided at Local Activity Schedulers which schedule the activities for their local execution elements/nodes. Execution of activities locally are performed by any number of processes that reside in each execution element. These processes are assigned operating system priorities by the respective Local Activity Scheduler based on their assigned activities for execution and the task schedule.